

PISTON HAVING A PATTERNED COATING AND METHOD OF APPLYING SAME

ABSTRACT OF THE DISCLOSURE

The present invention relates to a piston adapted for reciprocal movement within the cylinders of an internal combustion engine. The piston includes a body having a crown formed at the uppermost margins of the body and a skirt, depending from the crown, adapted for relative sliding motion with respect to the cylinder. The piston further includes a coating bonded to the piston skirt so as to be juxtaposed between the skirt and the cylinder. The coating has a plurality of recesses formed thereon so as to define a predetermined pattern of recesses on the surface of the skirt that retains lubricant between the skirt and the cylinder wall. The coating may also direct lubricant along the outer circumference of the piston skirt during reciprocal movement of the piston within a cylinder. A method of applying the coating to the piston skirt is also disclosed.